

**IN THE CLAIMS:**

Please amend claims as follows:

Claims 1-16 are canceled.

17. (CURRENTLY AMENDED) A method for generating a cytotoxic T-cell eliciting immune response to prostate-specific antigen (PSA) in a host, comprising, administering to the host a sufficient amount of PSA or a cytotoxic T-cell eliciting epitope thereof and an effective amount of a cytokine or co-stimulatory molecule.
18. (CURRENTLY AMENDED) A method for generating a cytotoxic T-cell eliciting immune response to prostate-specific antigen (PSA) in a host, comprising, administering to the host a sufficient amount of PSA or a cytotoxic T-cell eliciting epitope thereof, and an effective amount of a cytokine or co-stimulatory molecule and, further comprising at least one periodic interval thereafter contacting the host with additional PSA or a cytotoxic T-cell eliciting epitope thereof to boost the immune response.
19. (PREVIOUSLY PRESENTED) The method of claim 18, wherein the host is administered a boosting amount of PSA by introducing a pox virus vector to the host having at least one insertion site containing a DNA segment encoding PSA or a cytotoxic T-cell eliciting epitope thereof operably linked to a promoter capable of expression in the host.
20. (CURRENTLY AMENDED) The method of claim 19, wherein the pox virus is selected from the group of pox viruses consisting of suipox, avipox, and capripox ~~and orthopox~~ virus.
21. (CANCEL)
22. (CURRENTLY AMENDED) The method of claim 20, wherein the avipox is fowlpox, canary pox [[and]] or pigeon pox.
23. (PREVIOUSLY PRESENTED) The method of claim 20, wherein the suipox is swinepox.
24. (CURRENTLY AMENDED) The method of claim 17 or 18, wherein the PSA or T-cell eliciting epitope is formulated with an adjuvant or is in a liposomal formulation.

25. (PREVIOUSLY PRESENTED) The method of claim 24, wherein the adjuvant is selected from the group consisting of RIBI Detox, QS21 and incomplete Freund's adjuvant.
26. (CURRENTLY AMENDED) The method of claim 17 or 18, wherein the cytokine is selected from the group consisting of IL-2, IL-6 or IL-12.
27. (CURRENTLY AMENDED) The method of claim 17 or 18, wherein the costimulatory molecule is selected from the group consisting of B7.1 or B7.2.
28. (PREVIOUSLY PRESENTED) The method of claim 18, further comprising administering to the host additional cytokine or co-stimulatory molecule.
29. (PREVIOUSLY PRESENTED) The method of claim 18, wherein the pox virus vector further contains a DNA encoding a cytokine or co-stimulatory molecule.
30. (NEW) The method of claim 19, wherein the host is initially administered the PSA or cytotoxic T-cell eliciting epitope thereof by introducing a pox virus vector to the host having at least one insertion site containing a DNA segment encoding PSA or a cytotoxic T-cell eliciting epitope thereof operably linked to a promoter capable of expression in the host.
31. (NEW) The method of claim 30, wherein the pox virus is selected from the group of pox viruses consisting of suipox, avipox, capripox and orthopox.
32. (NEW) The method of claim 31, wherein the pox virus is the orthopox virus.
33. (NEW) The method of claim 32, wherein the orthopox virus is vaccinia.
34. (NEW) The method of claim 33, wherein the boosting amount of PSA is administered by introducing an avipox.
35. (NEW) A method for generating a cytotoxic T-cell eliciting immune response to prostate-specific antigen (PSA) in a host, comprising, contacting the host with a sufficient amount of PSA or a cytotoxic T-cell eliciting epitope thereof and an effective amount of a co-

Application No.: 09/693,121  
Response to Office Action dated January 21, 2004  
Amendment dated July 21, 2004

stimulatory molecule, wherein the PSA or T-cell eliciting epitope is formulated with an adjuvant or is in a liposomal formulation.